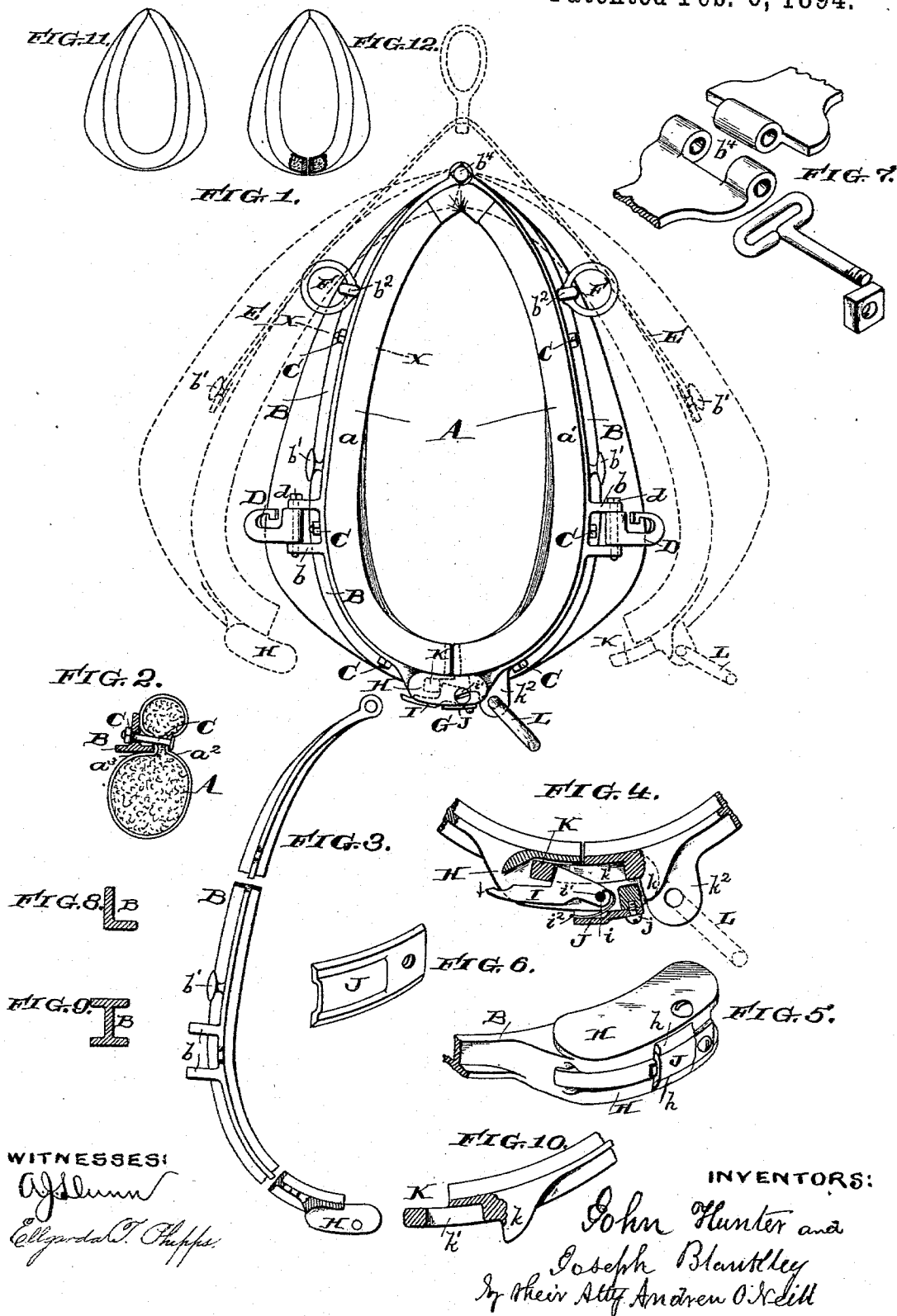


(No Model.)

J. HUNTER & J. BLANKLEY.
HAME.

No. 514,368.

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UNITED STATES PATENT OFFICE.

JOHN HUNTER AND JOSEPH BLANKLEY, OF PHILADELPHIA, PENNSYLVANIA.

HAME.

SPECIFICATION forming part of Letters Patent No. 514,368, dated February 6, 1894.

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To all whom it may concern:

Be it known that we, JOHN HUNTER and JOSEPH BLANKLEY, both of the city and county of Philadelphia, State of Pennsylvania, have invented a certain new and useful Improved Collar for Harness, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to that class of horse-collars in which the hames are permanently secured thereto and form a part thereof; such for instance as are used in fire departments or where the quick application of the collar to the horse is necessary; and it consists in a new and useful horse-collar which is light, strong, and having a certain shape from which shape it cannot be drawn by strains, or otherwise.

The nature of our invention will be best understood as described in connection with the drawings in which it is illustrated and in which—

Figure 1 is a front elevation of our improved horse-collar; Fig. 2 a cross-sectional view on the line X—X of Fig. 1; Fig. 3 a front elevation of one of the hames partly in section. Fig. 4 is an enlarged sectional view of the coupler. Fig. 5 is a perspective view of the coupler-head. Fig. 6 is a perspective view of the plate against which the spring in the coupler-head acts. Fig. 7 is a detached perspective view of the hinged joint. Fig. 8 is a sectional view illustrating that angle-iron may be used in place of the T-iron in the manufacture of the hame-parts. Fig. 9 is a sectional view illustrating that channel-iron may be used for the hame-parts. Fig. 10 is a front elevation partly in section of one end of the coupler without the lug for the breast-chain ring shown in Figs. 1 and 4. Fig. 11 is a face view of the collar prior to cutting the lower end. Fig. 12 is a face view of the collar partly in section after cutting the lower end, showing the insertion of the facings.

A is the body of the collar made in two sections or halves a and a' and having in each section a longitudinal groove or crease, a^2 and a^3 , which crease divides the respective sections into the two wales. This collar is made by fitting a tube of leather to a horse's neck

and filling or stuffing it with straw or other suitable material in such a manner as will cause said tube to conform to the exact contour and shape of that particular horse's neck. The ends of this tube are then stitched together in such a manner that the top of the collar will be flexible (Fig. 11). The collar is then cut through its bottom and the parts exposed are faced with suitable material (Fig. 12).

In making the hames B (Fig. 3) we take a wrought iron strip of angle-iron of T, H or double-channel, or angle shape (preferably the T shape as shown at B, Fig. 2) of the exact circumference of the body of the collar; we then cut this strip into two sections. At the top end of each of the sections are welded or otherwise affixed hinge-parts (Fig. 7). At the bottom end of one of the sections is welded, forged, or otherwise affixed plates H (Figs. 3 and 4) between which is placed the hook or latch I, pivoted at i by the pin i' and acted upon by the spring i^2 pressing against a plate J fastened to the plates H by means of screw j and beveled edges or projections h on said plates H, the whole forming what we term the coupler-head. On the bottom end of the other section of the hame-parts are the slotted tongue K and lug k ; the slot or recess k' in the tongue being adapted to receive the hook I in the coupler-head (Fig. 10).

When hames or collars of this class are made for double harness an additional lug, k^2 , carrying the breast-chain ring L is provided (Figs. 1 and 4). But when made for single harness the breast chain ring is dispensed with and also the lug k^2 and the construction is as explained above and shown in Fig. 10. On each section of the hame-parts are welded, forged or otherwise affixed the lugs b adapted to receive the trace-hooks D which are pivoted to said lugs b by bolt d (Fig. 1). Besides these lugs d , and above them on each of the said sections of the hame-parts, are welded, forged, or otherwise affixed buttons or projections b' to which is attached the strap E (as shown in dotted lines Fig. 1) for the purpose of suspending the collar when not in use. Again, above these buttons on each section of the hame-parts are pivoted lugs b^2 (Fig. 1) and to these lugs are rings F adapted to receive the reins.

Having thus prepared the collar-body and the hame-parts we then proceed to combine the two. Each section of the hame-parts is bent, pressed and fitted to the exact contour and shape of the collar; the hinge-parts at its tops are then fastened together and the bottom parts are locked together by the coupler; the hames are then riveted fast by bolts and rivets C or other suitable means (Fig. 2); they thus become part and parcel of the collar-body and the two elements may be said to form one entire thing and make a collar that is particularly well-adapted for the before-mentioned purpose; the collar body being flexible at the top and open at the bottom, and the hame-parts being hinged at their tops and coupled together at their bottoms which coupler can be readily opened and closed at will, the two sections can be readily swung apart from the bottom as shown by dotted lines in Fig. 1 and closed together again around the horse's neck as it is dropped thereon from its suspended position above by strap E as the animal takes its place in the shafts of the instrument to be drawn. It is also extremely light in weight, and doubly strong from the peculiar form of the iron band or hames and can never be drawn out of its original shape by strains, or from being suspended from the ceiling and stretched apart as has been the result of other collars of this class. It is especially essential to retain the shape of the collar as is evident from the fact of its being originally taken; otherwise the trouble would be useless. It will be noticed that the fulcrum *i* of the coupler-hook I. is in such relation to the strain that it is impossible to open the collar unless the hook is pushed out from the opposite end to that of the fulcrum thereby rendering it impossible for the collar to uncouple when in use.

We are aware that filling a tube of leather so that it will conform to the exact contour and shape of the neck of the particular horse for which it is made is not new; that hames have been made of angle iron; that to combine hames and horse-collars is old, but it is new with us to adapt a wrought angle iron strip to the exact contour and shape of a collar which has before been made to conform to the exact contour and shape of a particular horse; jointing the top thereof and coupling the bottom with a certain construction of coupler and obtaining the desired effect of lightness, strength and durability of said shape previously obtained.

As the hames have been heretofore made they have been cast in different sizes and then malleableized. From this they have been found to be unsatisfactory for the reason that they would never fit to the collar closely when such collar was made to fit a particular horse. For this reason and also on account of the kind of iron used the collar was not very strong and would very quickly be drawn out of shape from the strains, &c.

Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a horse-collar, the padded-body A shaped so as to conform to the exact contour of a particular horse's neck, consisting of sections *a* and *a'*, and having grooves *a*³, stitched together at its center so as to be flexible, and cut through its bottom, having the parts thus exposed faced with suitable material; in combination with a strip of wrought angle iron, cut into two sections, having affixed to their upper ends hinge-parts, and affixed to their lower ends suitable coupler-parts; such strips being shaped so as to conform to the exact contour of the collar-body and fastened thereto by suitable means, substantially as described.

2. In a horse-collar, the padded-body A shaped so as to conform to the exact contour of a particular horse's neck, consisting of sections *a* and *a'*, and having grooves or creases *a*³, stitched together at its ends so as to be flexible, and cut through its bottom, having the parts thus exposed faced with suitable material; in combination with a strip of wrought angle iron, cut into two sections, having affixed to their upper ends hinge-parts, one section having affixed to its lower end plates H having hook or latch I pivoted at *i* with suitable springs for said hook I; plate J fastened to plates H by screw *j* and beveled edges or projections *h*; the other hame-section having affixed to its lower end tongue K having recess or slot *k'* adapted to couple with hook I, substantially as described.

3. In a horse-collar, the padded-body A constructed as described, in combination with a strip of wrought angle iron cut into two sections, having affixed to their upper ends hinge-parts *b*, one section having affixed to its lower end plates H having hook or latch I. pivoted at *i* with suitable spring for said hook I; plate J adapted to beveled projections, *h*, on plate H and fastened to said plates H by screw *j*; the other hame-section affixed to its lower end tongue K having recess or slot *k'* adapted to couple with said hook I; lug *k*², and ring L, substantially as described.

4. In a horse collar, the padded-body A constructed as described, in combination with hame-parts made of angle iron, having at their upper ends hinge-joint *b*; coupler-parts G constructed as described at their lower ends; lugs *b* adapted to receive trace hooks D; buttons or projections *b'*; lugs *b*² for receiving rings F; and lug *k*² for receiving breast-chain ring L, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN HUNTER.
JOSEPH BLANKLEY.

Witnesses:

WM. J. BARR,
ANDREW J. STEWART.